

## NEW RECORD AND RANGE EXTENSION FOR *ANISOCENTROPUS PYRALOIDES* (TRICHOPTERA: CALAMOCERATIDAE) FROM WEST VIRGINIA<sup>1</sup>

Donald C. Tarter<sup>2</sup>, Eric S. Wilhelm<sup>2</sup>, Jeffrey E. Bailey<sup>3</sup>, Michael K. Nowlin<sup>3</sup>

**ABSTRACT:** The caddisfly *Anisocentropus pyraloides* is recorded for the first time from West Virginia. This record represents a northwest extension of the known range which was previously limited to the coastal plain and lower Piedmont at the northern end of its range. Larvae were collected from the Meadow River (Greenbrier County) among snags (e.g. logs) using a standard D-frame dip net. The number of caddisfly species now known from West Virginia is 191.

The family Calamoceratidae shows a tropical and subtropical distribution throughout all faunal regions (Wiggins, 1977) with the genus *Anisocentropus* occurring in the West Indies, Central America, Australia, and several oriental countries (Ross, 1967; Fischer, 1965). However, in North America the genus *Anisocentropus* has only one recognized species, *A. pyraloides* (Walker). Prior to this record, *A. pyraloides* was known from Florida, Georgia, South Carolina, Delaware, and Tennessee (Wallace and Sherberger, 1970; Edwards, 1966; and Wiggins, 1977). Generally, the species was limited to the coastal plain and lower Piedmont at the northern end of its range (Flint, pers. com.). Larvae and pupae of *A. pyraloides* were described from Georgia by Wallace and Sherberger (1970).

Larval collections were made in the main channel of the Meadow River, within the Meadow River wetland complex (latitude 37° 33'41" N, longitude-80° 24'39" W) in Greenbrier County, West Virginia. The river channel at this site has a mean width of 11 m and a mean depth of 1 m; the elevation is 732 m. The following water quality parameters were recorded at the time of collections: temperature 11.3 C; pH = 6.1; conductivity 175 micromhos; dissolved oxygen 1.9 mg/L; acidity 7 mg/L; alkalinity 11.0 mg/L CaCO<sub>3</sub>; hardness 66 mg/L CaCO<sub>3</sub>; sulfate 42.0 mg/L; dissolved solids 87.0 mg/L; total phosphates 0.016 mg/L; NH<sub>3</sub>-N 0.32 mg/L; and NO<sub>2</sub>-NO<sub>3</sub> 2.04 mg/L.

Eighteen larvae were collected on 13 October 1994 from among snags (submerged woody debris/logs) using a standard D-frame dip net (700 micron mesh). Logs were sampled by scraping the net along the surface. According to Wallace and Sherberger (1970), *A. pyraloides* larvae prefer smaller streams, 1-6 m wide with slow to moderate current, that are usually bordered by deciduous forest. They found larvae in streams ranging from 12-300 m in elevation in the south-

<sup>1</sup> Received December 21, 1995. Accepted January 30, 1996.

<sup>2</sup> Department of Biological Sciences, Marshall University, Huntington, West Virginia 25755.

<sup>3</sup> West Virginia Bureau of the Environment, Division of Environmental Protection, Office of Water Resources, Watershed Assessment Program, 694 Winfield Rd., St. Albans, WV 25177.

east. Early instar larvae appear to be associated with leaf drifts and late instars with logs and rocks (Wallace and Sherberger, 1970).

The Meadow River wetlands comprise the second largest wetland complex in West Virginia, containing approximately 1392 ha (3131 acres) of swamp and wet meadow (Evans *et al.*, 1982). The wetlands are situated in the western end of Greenbrier County at the southern boundary of the Allegheny Mountain physiographic section of West Virginia (Strausbaugh and Core, 1978).

Following the addition of *Anisocentropus pyraloides* to the state checklist, 191 species of caddisflies, representing 16 families and 62 genera, are known from West Virginia (Stout and Stout, 1989; Tarter, 1990; Tarter and Sykora, 1990; Tarter and Kirchner, 1991; and Griffith and Perry, 1992).

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